

Managing and Conserving Living Resources and Their Habitats

The overall abundance and diversity of habitats and living marine resources in the Sound is a strong indicator of the health of the ecosystem. Years of neglect, mismanagement, and damaging actions have diminished these environmental indicators. These actions have resulted in water quality problems, have adversely affected critical habitats, and have contributed to damaging economic and environmental impacts from flooding, erosion, and runoff pollution.

CCMP Strategy:

The CCMP identifies the following elements to preserve, protect and enhance LIS living marine resources and their habitats: 1) restoring and enhancing aquatic and terrestrial habitats; 2) protecting and acquiring habitat; 3) developing inventories and management strategies for aquatic and terrestrial habitats; 4) managing endangered and threatened species; 5) managing harvested species; 6) managing exotic and nuisance species; 7) educating the public; 8) developing databases; 9) conducting Soundwide and site-specific research and monitoring; and 10) conducting living resource s and habitat research.

Environmental Indicators/Results/Trends

Primary environmental indicators are acres of habitat restored and miles of river corridor restored to anadromous fish passage. Of its goal of 2000 acres restored by 2008, the LISS has restored 338, with a number of acres of projects nearing completion. Of the goal of 100 river miles reopened to fish passage by 2008, more than 39 miles have been restored to date.

2001 Highlights:

- The states of Connecticut and New York made good progress toward the goals of the *1998 Habitat Restoration Strategy* to restore 2,000 acres of habitat and open 100 river miles to anadromous fish passage by 2008. As of 2001, more than 338 acres of habitat have been restored and 39 miles of river corridor have been reopened to anadromous fish passage. In 2001, 27.5 acres were restored and 7.25 river miles were reopened to fish passage.
- In 2001 CTDEP partnered with the New Haven Land Trust, USFWS, CWRP, and NRCS in completing a steep pass fishway at Pond Lily Dam on the West River, New Haven. CTDEP partnered with Save the Sound and the Town of Milford to repair a fishway at Clark Pond on the Indian River, Milford. The Lees Pond fishway on the Saugatuck River in Westport was modified to improve fish passage.
- During 2001, Connecticut purchased 4,182 acres of land, and awarded Open Space grants to municipalities and land trusts to purchase an additional 3,576 acres at a cost of \$45.6 million. New York's Open Space Plan serves as the blueprint for the State's land conservation efforts, which during the past several years, has conserved more than 300,000 acres of land across the state with an investment of \$300 million in Environmental Protection Fund and Clean Water/Clean Air Bond Act funds.
- Save the Sound, Inc., the National Audubon Society of New York State (NAS-NY), and the Regional Plan Association (RPA) continued work on the CCMP goal to create a Long Island Sound reserve system. In 2001 NAS-NY led a diverse working group of federal, state, and local agencies and organizations to coordinate development of a LIS reserve system proposal.
- The Westchester County Department of Planning and Soil and Water Conservation District have,

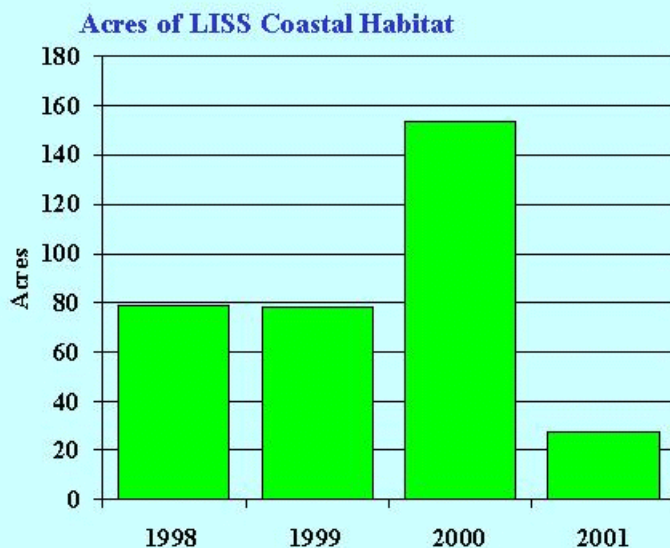
through 2001, received \$2.06 million in county, state, and federal funding to restore streams, wetlands and coastal habitat in the LIS watershed in Westchester County. Fourteen restoration projects have been completed or are in design. Projects range from stream bank stabilization and pond enhancement to salt marsh and vegetated dune creation to freshwater marsh restoration.

- The Management Committee approved a 2001 LISS research fund of \$350,000 to address a number of key areas of research on LIS, including living marine and marine-dependent resources. In 2001 five projects were selected for funding from the 38 proposals submitted.
- The LISS funded an intern at the University of Connecticut in Summer 2001 to begin development of a web-based guide to living marine resources research projects. The *Long Island Sound Finding Guide* will be maintained

by the UCONN library system and may be found at: <http://www.averypoint.uconn.edu/LIfindin.html>.

- The New York and Connecticut Sea Grant College Programs continued to coordinate and manage the LIS lobster research initiative in response to the 1999 lobster mortalities and shell disease outbreaks in the Sound. In November 2001 the Sea Grant programs sponsored, in cooperation with the Atlantic States Marine Fisheries Council the 2nd Annual *Long Island Sound Lobster Health Symposium* in Ronkonkoma, NY. The Symposium focused on the status of the lobster mortalities in LIS, bringing together researchers, academics, scientists, professional managers and lobstermen to exchange information and concerns. In 2001 the Sea Grant programs selected fourteen science research teams in seven states to study the causes of these lobster events.

Coastal Habitat Restoration Trend



CT DEP, Office of Long Island Sound Programs
and NY DEC Marine Resources Division

In 1998, the LISS adopted a goal of restoring 2000 acres of coastal habitat (e.g. dunes, tidal freshwater wetlands, forests, salt marsh wetlands, and submerged aquatic vegetation) by the year 2008.

Since 1998, more than 338 acres of coastal habitat have been restored in Connecticut and New York around Long Island Sound. Additional restoration projects are underway.

SUMMARY OF CCMP MANAGEMENT ACTIONS: MANAGEMENT AND CONSERVATION OF LIVING RESOURCES AND THEIR HABITATS

L-1. RESTORATION AND ENHANCEMENT OF AQUATIC AND TERRESTRIAL HABITATS (CCMP TABLE 40, P.107)

Key Elements: Continue and enhance programs to restore tidal wetlands and other habitats. Develop a coordinated strategy to inventory and prioritize habitat restoration and enhancement needs.

Description	2002 Planned Action
The USFWS-Coastal Program assisted CTDEP, Coastal America, and corporations in exploring restoration opportunities and incentives to increase corporate participation in the Corporate Wetland Restoration Partnership. Northeast Utilities hosted a meeting during which benefits to corporate sponsors, candidate restoration sites, and partnership improvements were discussed. The USFWS offered to produce a map that would portray the priority restoration projects and completed works.	Continue to work with Coastal America and the corporate partners to expand the CWRP and implement priority restoration projects.
Connecticut continues to restore degraded tidal wetlands through its existing programs and in collaboration with the Long Island Sound Study Habitat Restoration initiative, which funds a restoration coordinator. CTDEP has established a Tidal Wetland Restoration Team (i.e., USFWS, NMFS, NRCS, Save the Sound) which identifies annual work priorities. In 2001 construction was completed at Tuttle Point, Guilford. This project resulted in an additional 4 acres of tidal wetlands restored toward the goal of 2000 acres by 2008.	A project begun in 2001 on the Lower CT River (Great and Upper Island) is expected to be completed adding another 300 acres of restored and enhanced tidal wetland toward the goal.
Connecticut continues to use the Coves and Embayments Program to fund preliminary engineering, design and construction for the restoration of degraded coves especially those dominated by tidal wetlands.	The preliminary work plan for 2002 has nearly 17 wetland restoration projects identified - this includes preliminary engineering, design and construction activities. Phragmites control work will continue in 2002 at several sites.
Through 2001, the Westchester County Department of Planning and Soil and Water Conservation District have received \$2.06 million in county, state and federal funding to restore streams, wetlands and coastal habitat in the Long Island Sound watershed in Westchester County. Fourteen restoration projects have been completed or are in design. Projects range from stream bank stabilization and pond enhancement to salt marsh and vegetated dune creation to freshwater marsh restoration. Information on the County's habitat restoration efforts may be found on their homepage at: http://www.westchestergov.com/planning .	Stream restoration construction will be completed; restoration of a pond and freshwater marsh will start, and design of three other restoration projects will begin. Westchester County will seek New York State Clean Air/Clean Water Bond Act grants and other funding for additional projects.
Connecticut has established a coastal barrier habitat restoration team.	Invasive species control for Black Point Beach in E. Lyme and the Team will be identifying a work plan for 2002.
The CTDEP LISS Habitat Restoration coordinator is the lead for removal of the invasive aquatic plant water chestnut from Connecticut River waters. Funds for this project were received from USFWS, National Fish & Wildlife Foundation, NMFS, and The Nature Conservancy.	Continue to harvest water chestnut for Connecticut River sites.
In 2001 Connecticut used the following sources of non-state funds to support habitat restoration: National Fish & Wildlife Foundation, USFWS, CWA §319, The Nature Conservancy, Intermodal Surface Transportation Efficiency Act, Corporate Wetlands Restoration Partnership funds, Ducks Unlimited, Connecticut Waterfowl Association, CT Conservation Stamp Program, Connecticut Valley Waterfowlers Association, Connecticut Audubon, and NRCS.	On-going
The LISS Small Grants program provided funding to North Shore Audubon Society for the Garvies Point Museum and Preserve in 2001 to restore a pond and habitat area.	

L-2. HABITAT PROTECTION AND ACQUISITION (CCMP TABLE 41, P.110)

Key Elements: Maintain the effectiveness of permit programs (e.g. for wetlands, stormwater, dredging) to regulate use and development affecting aquatic resources and critical habitats. Expand acquisition programs and efforts to protect habitats from development and establish a reserve system of areas of land and water of outstanding or exemplary scientific, educational, or biological value. Manage Federal wildlife refuges.

Description	2002 Planned Action
New York City's CSO facility planning projects for the Hutchinson River, Westchester Creek, the Bronx River, Flushing Creek and Bay, and Alley Creek are continuing at various levels of planning, design, and construction. Once completed, the facilities will minimize CSOs and protect habitats in these tributaries to the East River and Western Long Island Sound.	
<p>The FWS began work on the development of an ecological component for the LIS reserve system in 2001. FWS assembled information on existing reserve concepts, coordinated with the state resource specialists, acquired relevant data layers for GIS use, and provided progress summaries to the Management Committee.</p> <p>The State of Connecticut Bond Commission approved \$20 million for the Recreation and Natural Heritage Trust Program (RNHT) and \$12 million toward the Open Space and Watershed Land Acquisition Program (OSWLA). The RNHT program enables the CTDEP to purchase open space for additions to or establishment of State parks, forests, wildlife management areas, aquatic access, and natural resource areas. During 2001 the State of CT purchased 4,182 acres through RNHT, and awarded Open Space grants to municipalities and land trusts to purchase an additional 3,576 acres at a total cost of over \$45.6 M.</p> <p>Since the establishment of the Governor's Open Space Program more than 21,500 acres has been protected at a cost of approximately \$85.6 million. This includes the \$40.1 million spent in partnership with towns, conservation groups and water companies, and an additional \$45.5 million the state has spent on direct purchases of open space that is now part of the state's inventory of public land.</p>	<p>FWS expects to complete development of ecological criteria, propose a site nomination process, and draft a list of eligible sites.</p> <p>The CT DEP will close on the acquisition of fee ownership and conservation easements to permanently protect over 15,400 acres of open space land.</p> <p>Continue to evaluate and acquire land through the RNHT program. Currently there are over 49 purchase and sales agreements pending and over 28 properties being actively pursued for acquisition.</p> <p>The CT DEP will initiate a multi-year inventory and mapping of all open space land in CT.</p>
The goals of Connecticut's open space acquisition program are to acquire 10 percent of the state's land area as open space held by the state, and not less than 11 percent of the state's land area held by municipalities, water companies, or nonprofit land conservation organizations as open space. The state currently owns 221,200 acres its system of state park, forest, wildlife, fishery, and natural resource management areas. As of 2001, the CTDEP has 69% of the 320,576 acre goal of open space land targeted for state acquisition. Municipalities, nonprofit land conservation organizations, and water companies own 220,160 acres of their targeted goal of 352,600 acres (62%). To date 65.6% of the total combined goal has been achieved. Combined, these CT entities currently hold 13.5% of Connecticut's land area as open space.	
<p>New York's Open Space Plan serves as the blueprint for the State's land conservation efforts, which during the past several years, has conserved more than 300,000 acres of land across the State with an investment of \$300 million in Environmental Protection Fund and Clean Water/Clean Air Bond Act funds. NYSDEC issued its draft 2001 Open Space Conservation Plan in October 2001.</p> <p>The Draft plan contains: a comprehensive description of programs and policies that affect the conservation of the State's open space resources; a compilation of major conservation successes accomplished under the plan; a list of priority projects; conservation strategies for major resource areas; evaluation and criteria used to determine Environmental Protection Fund (EPF) and Clean Water/Clean Air Bond Act spending priorities; and recommendations by regional advisory committees and the Governor's Quality Communities Task Force to improve New York's open space conservation program.</p> <p>A number of priority projects are included in the LIS watershed area, including on Long Island, the LIS Coastal Area, and Western Suffolk/Nassau Special Groundwater Protection Area; the Bronx River Trailway; the Westchester Marine Corridor, and the Eastchester Bay Waterfront. The draft Plan is posted on the NYSDEC website at: http://www.dec.state.ny.us/website/dlf/osp/toc2001.html.</p>	Finalization of the plan in 2002.

L-3. INVENTORIES AND MANAGEMENT STRATEGIES FOR AQUATIC AND TERRESTRIAL HABITATS (CCMP TABLE 42, P.112)

Key Elements: Develop habitat management strategies for specific complexes or regions using a watershed perspective.

Description	2002 Planned Action
NOAA's Office of Response and Restoration completed the production of Environmental Sensitivity Index maps, printed in December 2001. A digital version is scheduled for delivery to CTDEP in Winter 2002.	CTDEP will obtain and incorporate the ESI data into its Oil Spill GIS system.
CTDEP continues to assist the CT Corporate Wetland Restoration Program (CWRP). Several new corporations have donated businesses and services. The program funded a project to identify potential inland wetland restoration sites and provided funding for the restoration of the Pond Lily Dam riverine migratory corridor project.	Convene an Advisory Board, finalize the prospectus and assist CWRP in selecting restoration projects.
CTDEP continues to create coverages of coastal resource information to support oil spill response. The NOAA-funded Environmental Sensitivity Index mapping project was completed and printed in December. An anadromous finfish restoration GIS was completed. CTDEP completed the Sediment Quality Information Database to manage data related to dredging.	On-going. Eelgrass beds in eastern LIS will be mapped from aerial photography to be taken in the spring of 2002.
In 2001 NYSDEC conducted a study of tidal wetlands losses in the LIS/Jamaica Bay coastal area. Wetlands losses were seen to be significant and are currently unexplained. Similar losses were noted in Connecticut by CTDEP, first noted at the Fivemile River in Darien. NYSDEC briefed the Management Committee on their preliminary findings at the October 2001 meeting.	Further study of tidal wetlands losses is planned for 2002.

L-4. MANAGING ENDANGERED AND THREATENED SPECIES (CCMP TABLE 43, P.116)

Key Elements: Continue endangered species programs and develop lists of Long Island Sound endangered species to aid management programs

Description	2002 Planned Action
The USFWS-McKinney Refuge, in partnership with CTDEP, USGS, CT Audubon Society, National Audubon Society, The Nature Conservancy, Little Harbor Lab, Inc., and several municipalities studies, and monitored managed, and protected the nesting population of the endangered roseate tern on Falkner Island. The number of nesting pairs was down slightly from 115 pairs in 2000 to 100 pairs in 2001.	The USFWS CT River-LIS Ecosystem Team plans to contribute funds to continue efforts.
The LISS Small Grants Program funded a project in 2000 to study the diamondback terrapin population and nesting habitats in the Oyster Bay, Long Island area in Spring/Summer 2001.	
NYSDEC's Natural Heritage Program updated its <i>Rare Plant List</i> in April 2001. The 62 page document is posted on the NYSDEC website at: http://www.dec.state.ny.us/website/dfwmr/heritage/plants.htm .	The program annually reevaluates the list.

L-5. MANAGING HARVESTED SPECIES (CCMP TABLE 44, P.117)

Key Elements: Ensure safe consumption and enhanced production of harvested species through fishery management plans, improved fish passage and habitat improvements. Support related programs such as oyster cultch placement, artificial reef development, dredging windows, and incidental take of nontarget species or entrainment/impingement at industrial facilities

Description	2002 Planned Action
<p>The USFWS CT River-LIS Ecosystem Team funded seasonal positions vital to hatchery production and distribution of Atlantic Salmon to the Connecticut River watershed. This commitment enhances efforts to restore Atlantic Salmon to historically used habitats.</p>	<p>USFWS will continue its salmon production and work with partners to restore Atlantic salmon.</p>
<p>CT DEP continues to award grants and participate in restoration of riverine migratory corridors for anadromous fish in the streams and rivers of the state. In 2001 a steep pass fishway was completed at Pond Lily Dam on the West River, New Haven. CTDEP partnered with the New Haven Land Trust, USFWS, CWRP, and NRCS.</p> <p>CTDEP partnered with Save the Sound, Inc. and the Town of Milford to repair a fishway at Clark Pond on the Indian River, Milford.</p> <p>A fishway was modified to improve fish passage at Lees Pond on the Saugatuck River, Westport, CT.</p> <p>A total of 6.25 riverine migratory corridor (RMC) miles in CT were opened up in 2001. The total RMC habitat restored since 1998 now stands at 38.15 miles.</p>	<p>Continue to work with partners to open up additional fish passages and provide funding for design and construction of fish bypasses and ladders. The preliminary anadromous fisheries restoration workplan for 2002 has three Connecticut projects slated for completion in 2002 and another nine projects identified for the next few years.</p> <p>The goal is to restore 100 miles by 2008.</p>
<p>The Hydrologic Habitat Modification Workgroup of the NPS Coordinating Committee has identified preparation of a "Strategic Plan for Dam Removal and Mitigation" as a priority activity. The NYSDEC will use CWA 319 funds to develop this plan under leadership of the USFWS. A specific element of the plan will be a set of evaluation criteria and a screening tool to identify potentially suitable sites for action to restore fish passage.</p>	

L-6. MANAGING EXOTIC AND NUISANCE SPECIES (CCMP TABLE 45, P.120)

Key Elements: Develop measures to prevent the introduction of undesirable species and implement a program to reduce the abundance of mute swans.

Description	2002 Planned Action
<p>In July 2001, CTDEP led a group of eight department and four non-agency volunteers in the removal of the invasive aquatic water chestnut plant from sites in the Connecticut and Hockanum Rivers. Hand pulling and raking from canoes was the method of choice. Removal of water chestnut before the plants can drop seeds is proving to be a very effective means of controlling this non-native plant. Last year's efforts yielded an estimated 50 tons of plant material removed from rivers. In 2001 the total harvest amounted to only 4.25 tons (a 91% decrease in the volume of plants). No water chestnut plants were found or harvested in Vinton Mill Pond in South Windsor and the population appears to have been eliminated.</p>	<p>Monitoring of these sites and the entire river will be ongoing for as long as 7-10 years.</p> <p>Invasive species control is planned for Black Point Beach in E. Lyme and the Team will be identifying a work plan for 2001.</p> <p>Continue to harvest water chestnut for Connecticut River sites. Monitoring of this site and the entire River will be ongoing for as long as 7-10 years.</p>

L-7. EDUCATING THE PUBLIC ABOUT THE PLANTS AND ANIMALS OF LONG ISLAND SOUND (CCMP TABLE 46, P.120)

Key Elements: Educate the public about the plants and animals of Long Island Sound and elicit volunteers assist plants and animals monitoring programs.

Description	2002 Planned Action
CTDEP continues to support a volunteer Secchi Disk network that is evaluating trends in light availability to help identify appropriate times or locations for restoring eelgrass.	Continue data collection efforts.
The Connecticut Sea Grant College Program in cooperation with the LISS is updating and reprinting the booklet, <i>Plants and Animals of Long Island Sound</i> . The booklet is very popular with elementary and secondary school teachers for classroom and field use. Approximately 10,000 copies of the booklet are being printed.	
The LISS Small Grants program funded a project to develop a horseshoe crab model for use in classrooms in Connecticut. The program also funded an oyster culture demonstration project at the Waterfront Center in Oyster Bay, and the Connecticut River Shad Festival to promote restoration of this species.	

L-8. DEVELOPING AN INFORMATIONAL DATABASE ABOUT LIVING RESOURCES AND THEIR HABITATS (CCMP TABLE 47, P.122)

Key Elements: Develop and expand informational databases on living resources and their habitats with an emphasis on GIS data for resource management

Description	2002 Planned Action
Through the NOAA Coastal Services Center's Coastal Fellow program, CTDEP completed the Sediment Quality Information Database (SQUID) to manage data related to sediment dredging and quality.	
CTDEP continues to create coverages of coastal resource information to support oil spill response. NOAA completed the production of the Environmental Sensitivity Maps (see Table L-3). Funding was secured for this project and NOAA's consultant produced ESRI maps based upon data provided by CTDEP staff.	Integrate into the dredged sediment management process the SQUID project.
Through the NOAA Coastal Services Center's Coastal Fellow program, CTDEP had a coastal fellow complete the second year of the Sediment Quality Information Database (SQUID) to manage data related to sediment dredging and quality.	
CTDEP developed an anadromous finfish GIS project. The project will be implemented and training in the use of the system will be given to in house and partner agency staff.	
The UCONN Marine Sciences Center is conducting preliminary studies of southeastern (CT) coves to evaluate and model the impacts of nitrogen upon biological communities.	
The LISS funded a summer intern to develop a "finding guide" to LIS living marine resource research projects. The finding guide will be managed through the UCONN library system and is posted at: http://www.averypoint.uconn.edu/Lifindin.html .	

L-9. SOUND WIDE AND SITE-SPECIFIC RESEARCH AND MONITORING (CCMP TABLE 48, P.123)

Key Elements: Continue and enhance monitoring of living resource populations with an emphasis on fishery surveys, colonial water birds, submerged aquatic vegetation, and lobsters.

Description	2002 Planned Action
<p>New York City's <i>Use and Standards Attainment Project</i> conducted extensive biological sampling programs in the East River and its tributaries for ichthyoplankton, benthic and epibenthic biota, and fish. Sediment and water column sampling was conducted simultaneously. These programs are developing data for characterizing existing biotic abundance and diversity, and habitat. Use attainability is being evaluated and areas of opportunity are being identified for restoring, enhancing and protecting habitats in the East River, its tributaries, the Hutchinson River, Eastchester Bay, Alley Creek and Little Neck Bay in Western Long Island Sound.</p>	
<p>The LISS provided funding for CTDEP and NYSDEC to map eelgrass beds in eastern LIS. A MOA has been developed with the National Wetlands Inventory Section of the USFWS. Funding was awarded too late to collect aerial photography in 2001. That flight will take place in the spring of 2002, the FWS will photo interpret eelgrass beds and digitize data.</p> <p>Colonial waterbirds - Human activity at sandy beaches used as nesting areas by plovers and terns continues affect reproductive success. Twenty volunteers, trained on plover and tern biology and how to educate the public about recovery efforts of the CTDEP Wildlife Division, monitored several beaches and distributed educational materials to beachgoers.</p> <p>Equipment was contributed to the long term roseate tern (state and federally endangered) project being conducted on Faulkner Island. Equipment was also contributed to a new foraging fish survey being conducted along the Connecticut coastline where roseate terns feed.</p> <p>CTDEP staff with the help of USFWS McKinney Refuge, CT Audubon Society, and other volunteers, completed the seventh Colonial Waterbird Survey in June checking 78 sites by boat and on foot.</p> <p>Lobster -- CTDEP Fisheries Division has compiled data showing the trend of lobster licenses issued over time. CTDEP's annual fisheries trawl survey continues to record lobsters caught in its trawls.</p>	<p>Aerial photography will be flown, photointerpretation will be done and a report will be produced to describe the project and where historic data exists, discussion of eelgrass trends will be reported.</p> <p>Ornithologist now think Southern New England may be home to half the world's population of saltmarsh sharp-tailed sparrows. Grant money from CT State income tax donations will be used to study declining populations of salt marsh sharp-tailed sparrows in CT coastal areas.</p>

L-10. LIVING RESOURCES AND HABITAT RESEARCH (CCMP TABLE 49, P.124)

Key Elements: Identify priorities for research to fill gaps in our understanding of the Long Island Sound ecosystem and to assist management of living resources.

Description	2002 Planned Action
<p>The Management Committee approved a LIS research fund of \$350,000 in 2001 supplemented by the New York and Connecticut Sea Grant College programs of \$25,000 each for a total LISS research fund of \$400,000. The LISS funded five research grants in 2001 to study: 1) isotope tracers of nitrates in Western LIS; 2) phytoplankton dynamics in LIS; 3) water column oxygen production and consumption; 4) saltmarsh breeding sparrows; and 5) new approaches for assessing mutagenic risk of contaminants in LIS.</p>	<p>The management committee approved a LIS research fund of \$350,000 in 2002. Work funded under the 2001 research grants is continuing in 2002.</p>
<p>CTDEP funded three research projects through the LIS License Plate Program: 1) a study of sediment accumulation rates at the Barn Island tidal wetlands (relates to assessing the effects of accelerated sea level rise upon coastal wetlands); 2) an investigation of potential impacts of new dock construction on the lower Connecticut River, and 3) an assessment of hypoxia in deep coastal embayments such as Frash Pond, Stratford. This program annually publishes research priorities - for the 2001 grants, this information was posted on the CTDEP website. In 2001 the funding awarded for these three projects totalled \$61,084.</p>	<p>Continue to fund priority research through the LIS License Plate program.</p>

<p>The Long Island Sound Lobster Initiative was formed after a July 2000 Congressional appropriation of \$6.6 million in federal funds to NOAA to research the scientific and economic impacts of the 1999 die off. Congress directed that approximately \$3.5 million of those federal funds be dedicated for research investigating potential causes. New York and Connecticut Sea Grant both received \$165,000 each in federal funding to facilitate communication of the research findings to lobster fishers, resource managers, and the public.</p> <p>In June 2001 NOAA NMFS and National Sea Grant College Program announced awards of \$3.5 million in federal research grants to 14 science research teams in seven states to determine the causes behind the 1999-2000 winter die-off of the Long Island Sound lobster fishery. The research is jointly-funded under the Long Island Sound Lobster Initiative, an endeavor of Sea Grant programs in Connecticut and New York along with the CTDEP and NMFS's Northeast Fisheries Science Center. The funded research will investigate many different factors on an ecosystem-wide basis. These include disease-causing organisms, pesticides, pollution, lobster crowding, water quality conditions including elevated temperatures and changes in salinity, and environmental conditions such as storm events.</p>	
<p>In 2001, the LISS provided Year 2 funding to UCONN's Department of Pathobiology to continue work begun in 2000 on the causes of the LIS lobster mortalities (PI- Dr. French).</p>	
<p>In 2001, the LISS funded UCONN to study the status and productivity of the saltmarsh breeding sparrow in LIS, a globally important population (PI- Dr. Elphick).</p>	<p>The two-year study will start in 2002 and continue through 2003.</p>